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CENTRAL INTELLIGENCE AGENCY

REPORT

**INFORMATION REPORT**

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COUNTRY Germany (Russian Zone)

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1. The yearly requirements of phosphorous anhydride ( $P_2O_5$ ) for the Russian Zone are as follows:

40,000 tons  $P_2O_5$  for superphosphates  
2,500 tons  $P_2O_5$  for phosphorous  
Approx. 750 tons  $P_2O_5$  for tribasic sodium phosphate.

2. The table below represents the exploitation of phosphorous for the Soviet Zone, inclusive of exports to the Western Zones.

<u>Product</u>	<u>Production</u> (in tons per year)	<u>Capacity</u>	<u>Sales</u>	<u>Phosphorous Requirements</u>	<u>Consignee</u>
Crude phosphorous trichloride	2,500	2,500	-	635	Bitterfeld
Pure phosphorous trichloride	480	480	456	-	Chemical industry of Western Zones.
Phosphorous pentachloride	36	36	36	-	"
Phosphorous oxychloride	1,800	1,800	380	-	"
Tricresylphosphate	2,200	2,200	600	-	Synthetic materials.
Chemically pure phosphoric acid	300	300	300	150	Foodstuffs
Technical phosphoric acid	1,200	15,000 (without salts)	1,200	540	Buna contacts
Sodium pyrophosphate (acid)	1,800	1,800	1,800	515	Baking powder
Di-ammonium phosphate	1,000	10,000	1,000	242 2,082	Fermentation industry
Tri-sodium phosphate	3,000	3,000	3,000	-	Water cleansing.

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## 3. The following comments apply to the above table:

- (a) Only the requirements for Buna and contacts were considered when quoting the figures for technical phosphoric acid.
- (b) The needs for pyrophosphate will be largely superfluous after the adipinic acid plant at Leuna has ~~begun to~~ produce.
- (c) If necessary, the production of di-ammonium-phosphate can be given up, if superphosphates and ammonium phosphates are used. The capacity for diammonium phosphate can be ascertained with complete exactitude, as tri-basic sodium phosphate is worked in the same equipment.
- (d) There is a new process for tri-basic sodium phosphate: decomposition of crude phosphates by nitric acid.

4. The phosphorous plant at Bitterfeld.

The phosphorous plant at Bitterfeld was 50% dismantled by March, 1946. In 1947, however, reconstruction work took place and was completed by January, 1948. The capacity is estimated at 3 tons per day (90 tons per month) or 1,080 tons per annum. This, however, is only a rough estimate; it varies between  $2\frac{1}{2}$  and 4 tons per day. As there is no sinter plant, lump phosphate (crude) from the U.S.A. or North Africa is needed. Experiments at briquetting have been undertaken (at plants such as Muldenstein tile works) because of the lack of suitable phosphates.

## 5. The raw materials and power required to produce these 1,080 tons of crude phosphorous are as follows:

Crude phosphates .....	9,000 tons
Pyrites .....	3,000 tons
Clay .....	900 tons
Anthracite .....	30 tons
Coke .....	1,800 tons
Kilowatt hours.....	34,000,000

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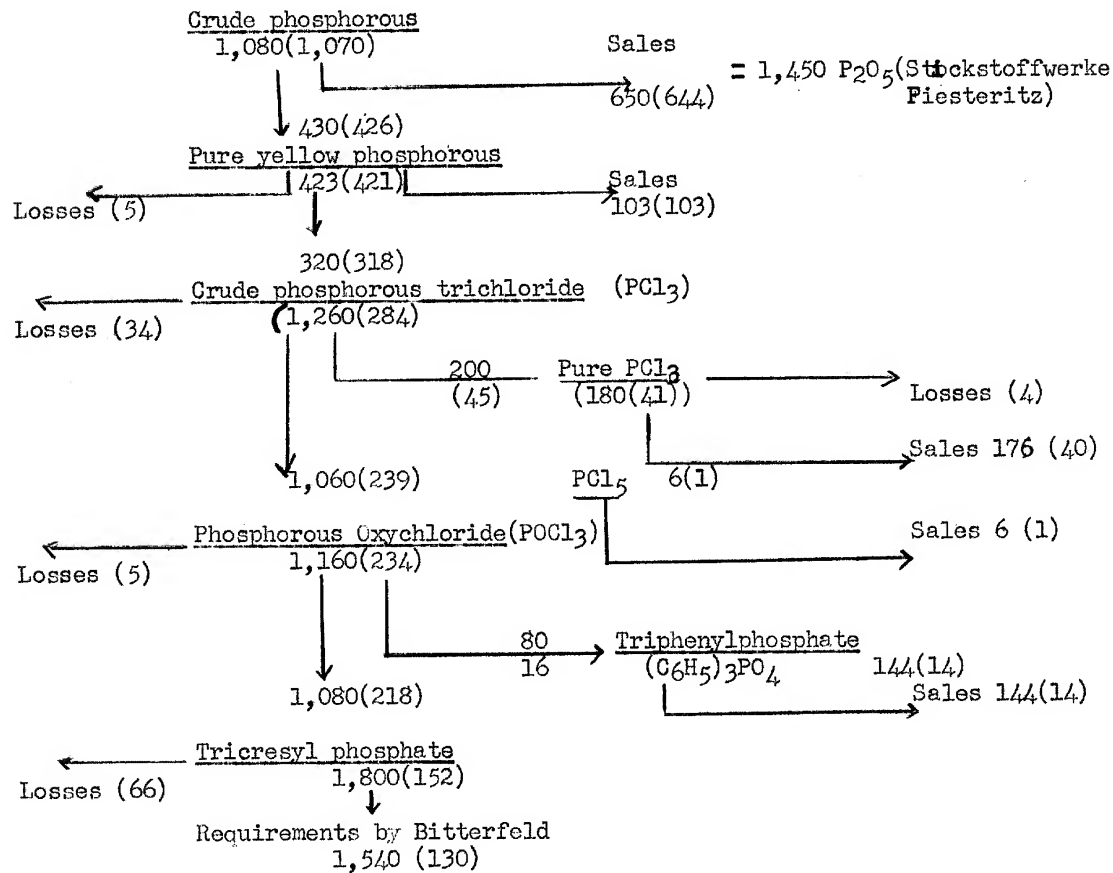
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6. Phosphorous exploitation at Bitterfeld in 1948

The figures in the table below represent tons per year: those in brackets, the phosphorous content:



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